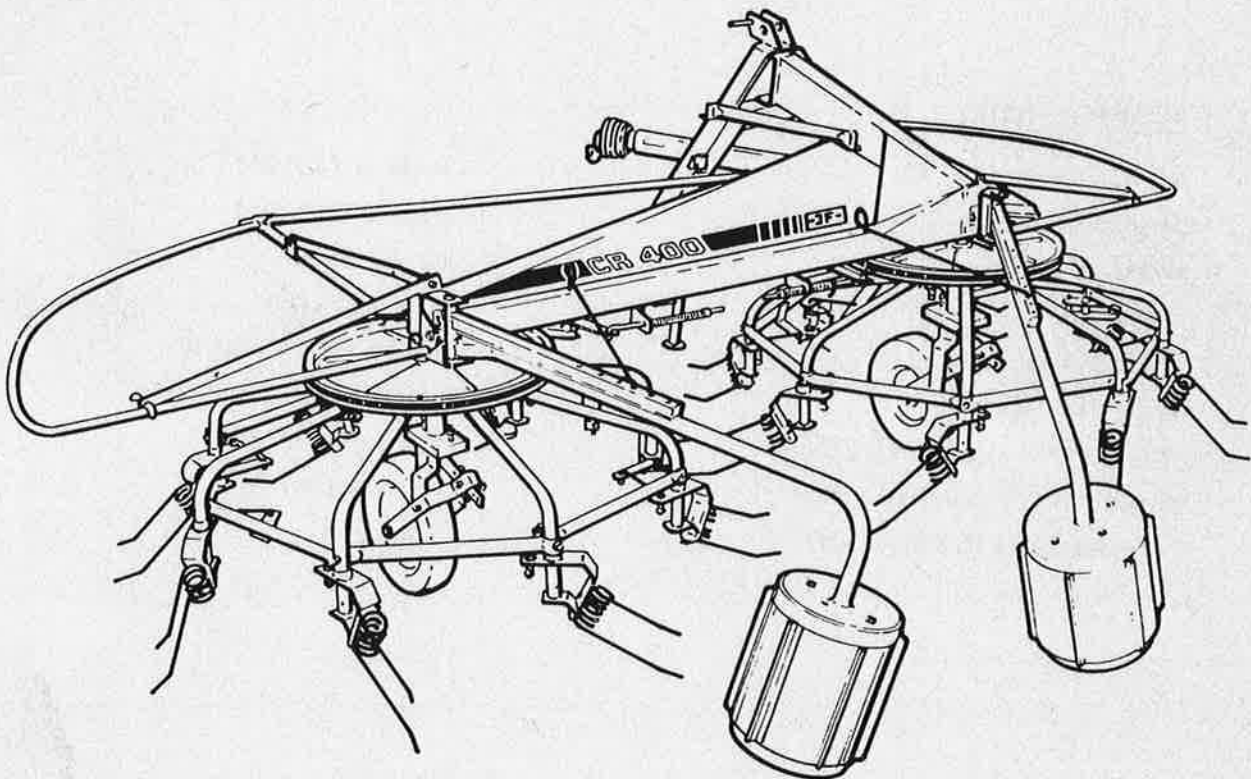


-JF-

CR 400

Rotary Tedder

Instruction Manual



Valid from April 1984



PROTECTIVE MEASURES

Never adjust the height while the tractor is running.

Protective hoops must be lowered during work and all guards placed.

Never lubricate or clean the machine while it is running.

Make sure that nobody stands near the machine before starting it.

TECHNICAL DATA:

Working width	4.00 m (13'2")
Transport width	3.00 m (9'10")
Working speed	up to 15 km/h (10 mph)
Rake tines	2 x 8
Power requirements at 540 r.p.m.	25-30 kW (35-40 HP)
Tyre dimension	5.00 x 8
Weight excl. bobbin rollers	420 kg (926 lbs.)
Weight incl. bobbin rollers	450 kg (992 lbs.)
Freewheeling P.T.O.-shaft	Standard

INSTRUCTION MANUAL FOR COMBI RAKE CR 400

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MOUNTING TO TRACTOR

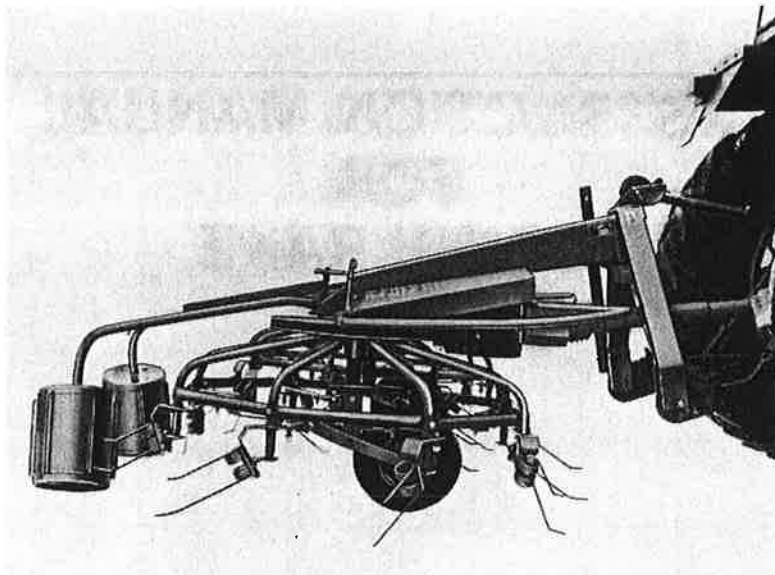


Fig. 1.

Mount the rake in the three-point linkage of the tractor - raise the jack.

Connect the PTO-shaft to the power take-off of the tractor and check that the shaft has at least a 100 mm (3.94 inches) mesh in working position.

ROTOR SPEED.

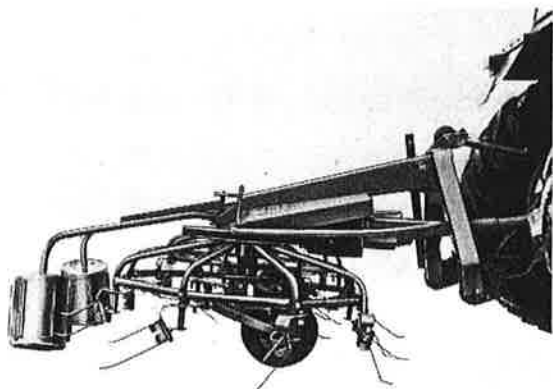
Adjust the number of revolutions of the rotor by the speed of the tractor motor.

When spreading relatively dry crop you are to drive at approx. 450 r.p.m. of the tractor's power take-off - for very moist crop we recommend approx. 540 r.p.m.

For the raking together and turning of completely dry crop we recommend approx. 300 r.p.m. of the power take-off, whereas approx. 360 r.p.m. are necessary for material that is still somewhat moist.

NOTE! The end result is not necessarily improved by a high number of rotations - Too high a number of rotations might result in leaf losses.

FORWARD INCLINED POSITION.



Tilt the machine forward by adjusting the top link and the wheels. The length of the top link should be such as to allow the rake tines just to go clear of the ground.

Fig. 2.

When spreading rather thick material, tilt the machine forward even further to allow a better drafting of the material.

To obtain a better cleanraking, leave the machine in a level position when raking together. The rake tines should just touch the ground. As a rule, the rake must be level in lateral direction, i.e. the wheels are set equally high.

WHEEL POSITIONS.

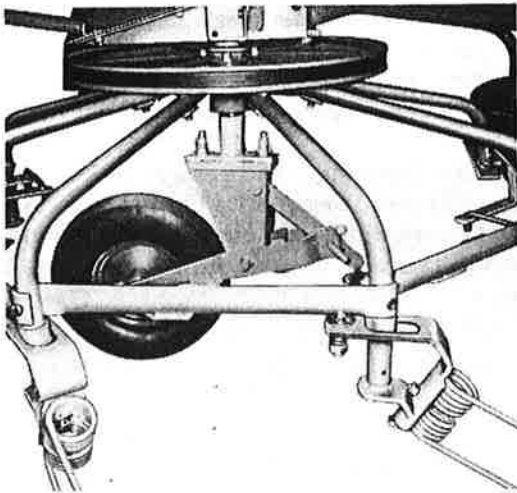


Fig. 3.

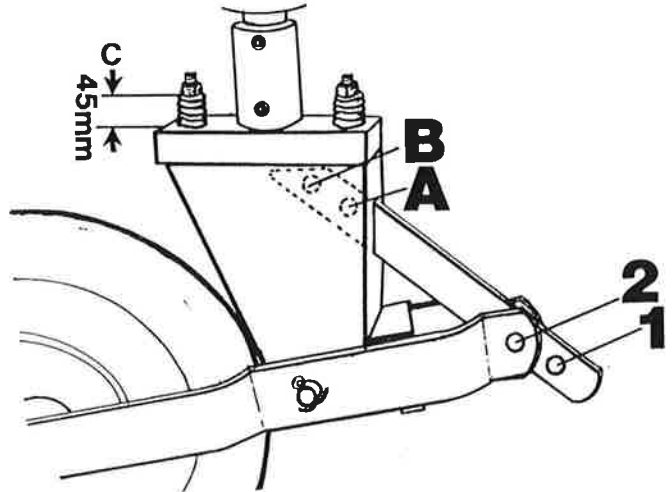


Fig. 4.

There are four positions for adjusting the height of the rake by means of various holes in the height adjustment rod. Use the holes A or B for a trial setting and then adjust, if necessary, using the holes 1 or 2.

NOTE: Generally the length of the top link has to be adjusted if the wheel position is changed.

The springs C on the wheel uprights allow a deviation of the wheels in cases the machine is turned sharply whilst in working position. Tighten the springs C to a length of 45 mm (1.76 inches).

ADJUSTMENT OF RAKE TINES.

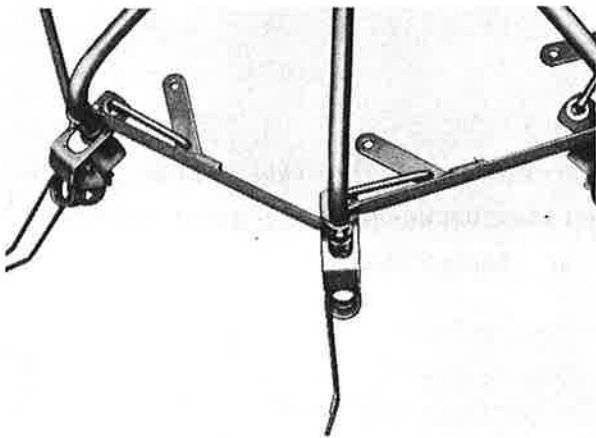


Fig. 5.

POSITION FOR SPREADING.

For spreading the tines are adjusted so that they point straight out from the rotor. The wheels are lifted to hole 2.

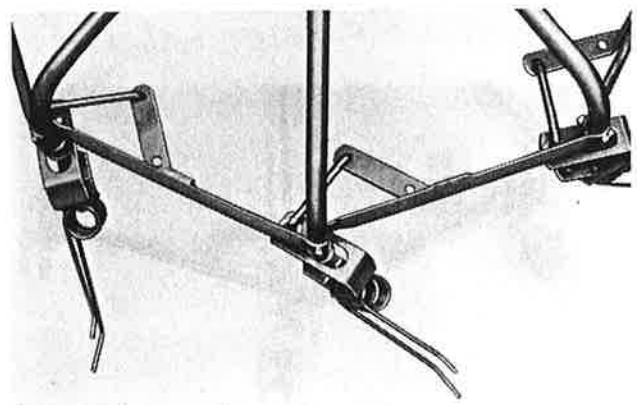
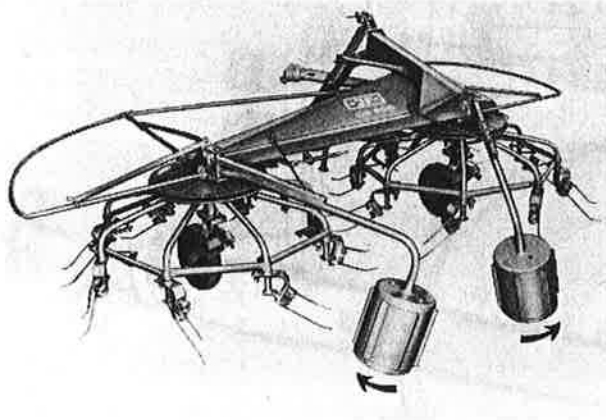


Fig. 6.

POSITION FOR RAKING.

In raking position the tines are adjusted so that they are in an oblique position backwards from the rotor. The wheels are lowered to hole 1.

SWATH ROLLERS.



The swath rollers are for raking together and turning of swaths. Please note that the right roller differs from the left one. They are mounted pointing downwards and away from each other.

Give the machine a level position with a slight forward tilt, allowing the rollers just to touch the ground and thus turn around during operation.

The rollers are not used for spreading.

Fig. 7.

DRIVING IN THE FIELD.

Do not drive forward with the rake in working position without the rotors running. The tines might bump against the ground causing breakage or bending. Do not let the tines rotate too closely to the ground. If they hit the ground too hard they will wear very easily and stones might get into the swath.

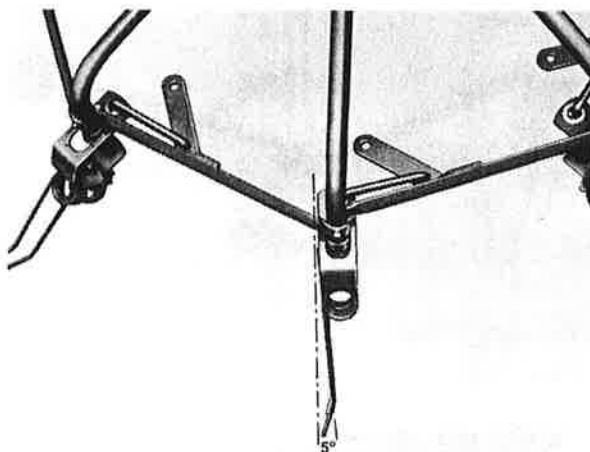
Lift the machine when turning in the field.

Check at regular intervals that the belts are tight.

Tighten bolts and nuts regularly - especially the bolts at the rake springs.

Make sure that guards and protective hoops are correctly placed and in working condition.

MOUNTING OF RAKE SPRINGS.



When tightening the rake tines, turn the tine backwards to a position of 5° to the tine holder.

Fig. 8.

TRANSPORT POSITION.

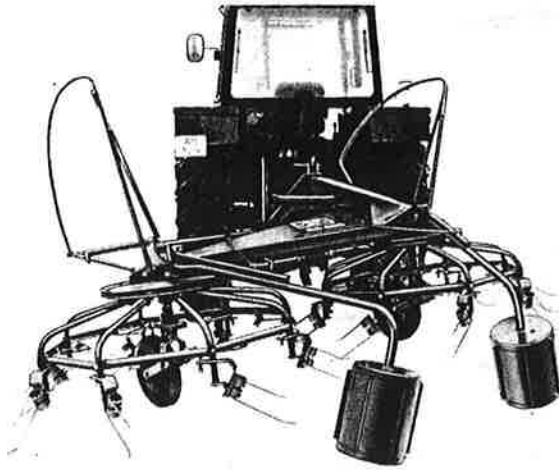


Fig. 9

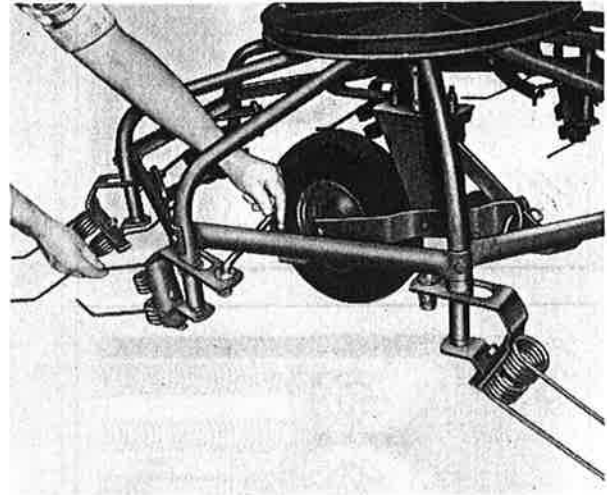


Fig. 9A

The machine is pivotably suspended in the top frame so that it can be swivelled behind the tractor in a slant position thus reducing the transport width.

Protective hoops are folded in and secured by means of spring pins.

Loosen the outer left rake tine from the locking pin, turn it forward 90°, and lock it again the usual way - see fig. 9A.

The lights are fitted.

REMEMBER to check that the rake tines do not touch the right tractor wheel when the machine is in transport position as this may cause damaged springs and tyres.

The rotors must not rotate in transport position. Lift the machine well clear of the ground when driving over uneven areas so that the tines will not go into the ground.

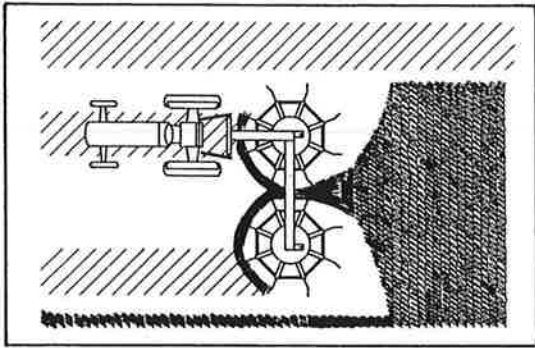
GENERAL ADJUSTMENTS FOR:

SPREADING:

1. Remove the swath rollers.
2. Rake tines in spreading position.
3. Place the wheels in hole No. 2.
4. Adjust the top rod so that the tines go just clear of the ground.
5. Between 450-540 r.p.m. of the P.T.O.

TOGETHER RAKING AND TURNING

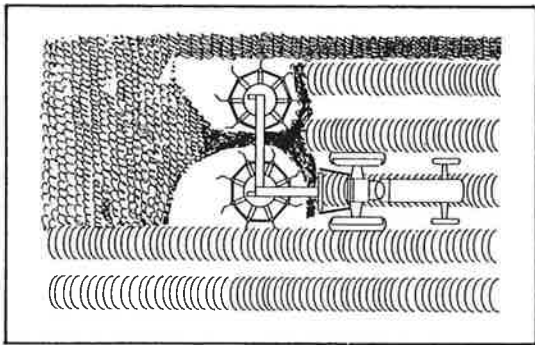
1. Mount the swath rollers in gathering position.
2. Rake tines in raking position.
3. Place the wheels in hole No. 1.
4. Adjust the top rod so as to just allow the tines to touch the ground.
5. Between 300-400 r.p.m. on P.T.O.



SPREADING OF :

2 swaths

Fig. 10.

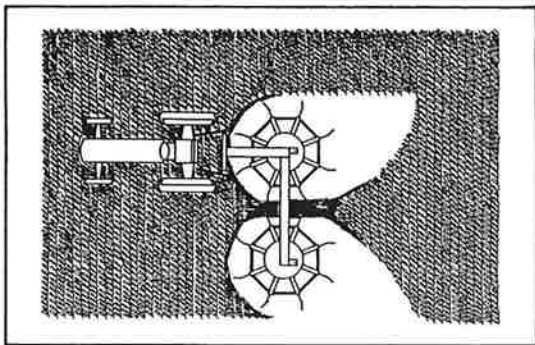


SPREADING OF :

3 swaths

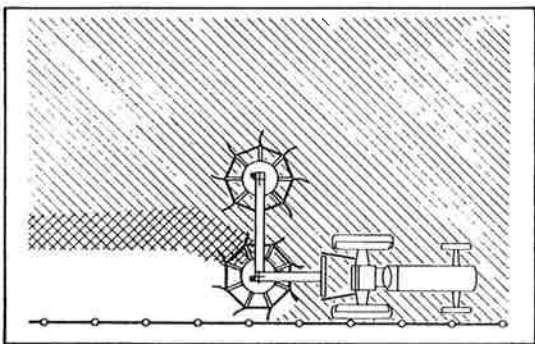
The machine should only have a slight forward tilt to be able to spread the centre swath.

Fig. 11.



TURNING OF WIDESPREAD MATERIAL.

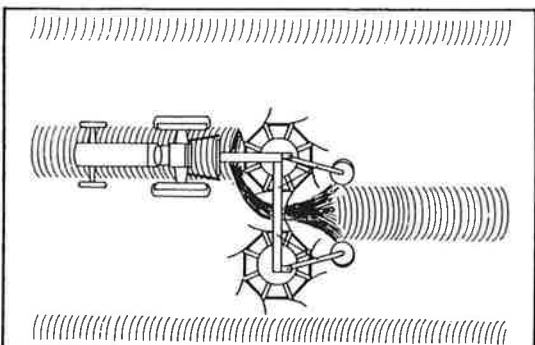
Fig. 12.



SPREADING FROM FENCE.

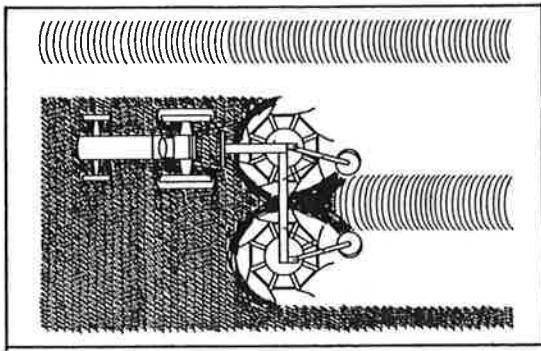
Rotor nearest fence in raking position.
Other rotor in spreading position.

Fig. 13.



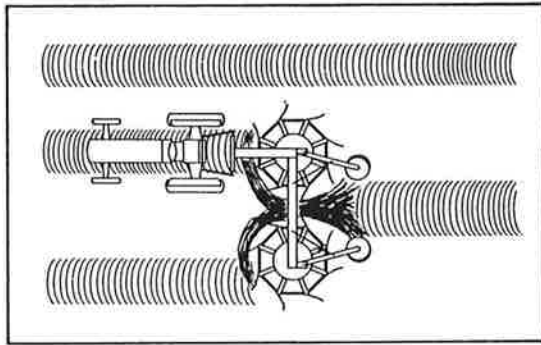
SWATH TURNING.

Fig. 14.



TOGETHER RAKING OF WIDESPREAD MATERIAL.

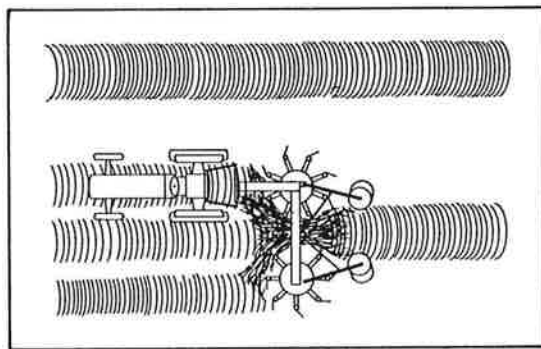
Fig. 15.



TOGETHER RAKING OF:

2 swaths

Fig. 16.



TOGETHER RAKING OF:

3 swaths

Fig. 17.

TOGETHER RAKING FROM DOUBLE WIDTH TO ONE SWATH:

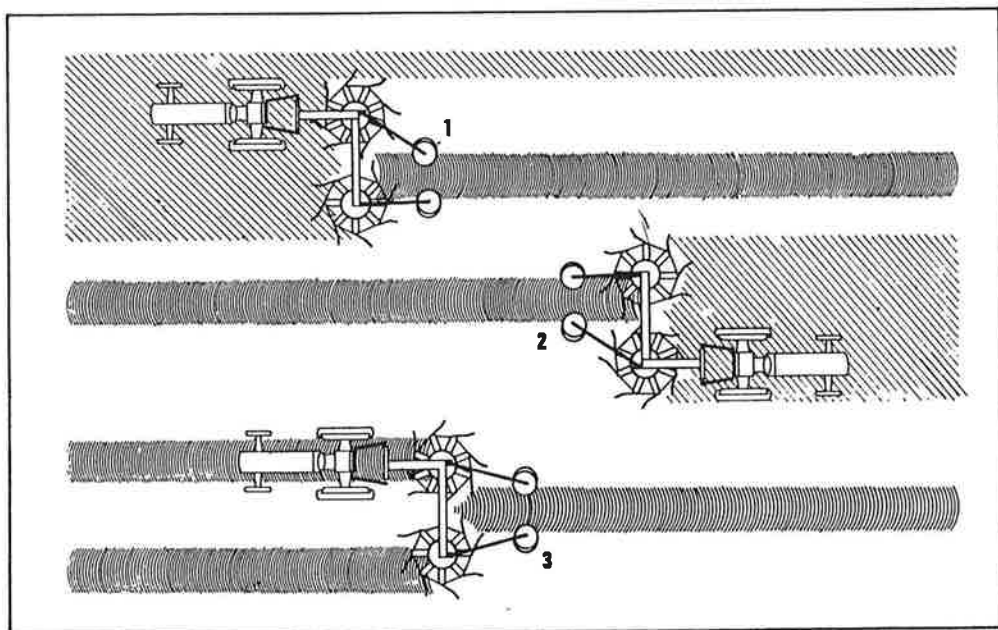


Fig. 18.

MOUNTING OF PROTECTIVE HOOPS.

The protective hoops are mounted as illustrated on the figure.

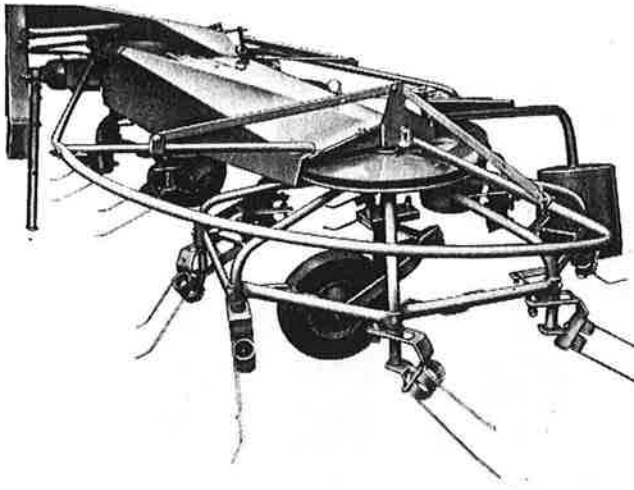


Fig. 19.

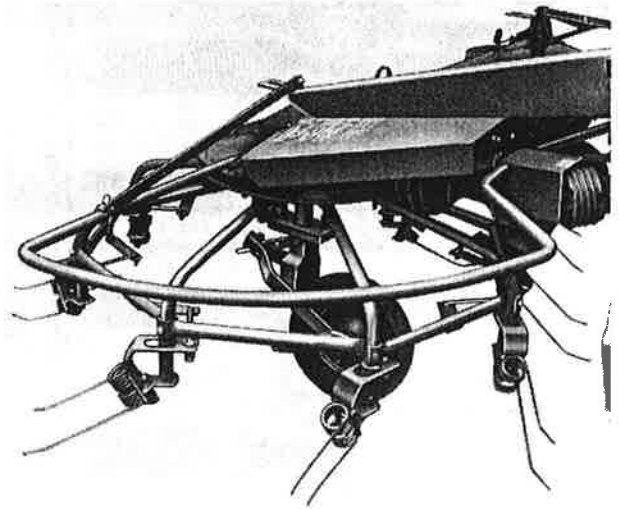


Fig. 20.

For transport the outer hoops can be swung up to vertical position and secured by the flat iron bar support.

REMEMBER to swing the hoops out again for driving in the field.

REPLACEMENT OF V-BELTS.

Place the belts from the rotors on the ground and drive the rake over them. The belts can now be pulled up over the rotors and mounted on the multi grooved belt pulley. The belts are then pulled over the right and left tension roller, and around the rotor pulleys.

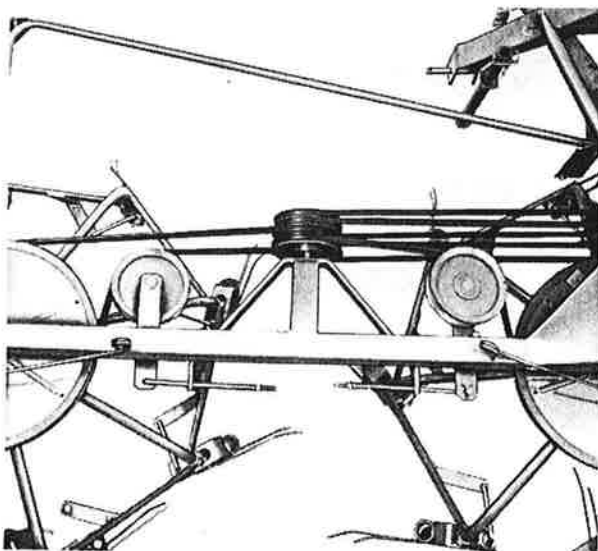


Fig. 21.

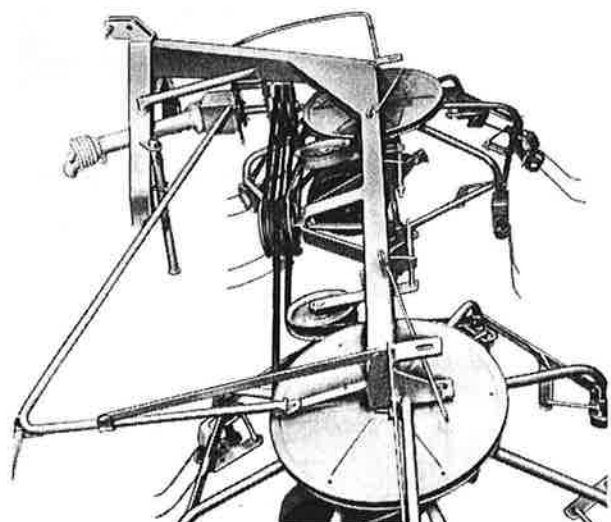


Fig. 22.

MAINTENANCE AND WINTER STORAGE.

Tighten bolts and nuts at regular intervals.

Check that the tines have not turned in the tine holder.

Replace broken rake tines.

Check that belts are sufficiently tight.

Never drive the machine without mounting the guards.

Never clean, lubricate or adjust the machine while it is running.

The belts are to be loosened for winter storage.

LUBRICATION.

Grease once or twice a day: Swath rollers 4 nipples

Grease once a day: P.T.O.-shaft 4 nipples

See also Waltersheid instruction

Grease once a week: Intermediary shaft 2 nipples

Wheel 2 nipples

PRESSURE OF TYRES:

36 lbs. or 2.5 atm. (bar).

NOTE:

When mounting valves after repair of the wheels, make sure that they are turned outwards to prevent them from getting torn off.

LIGHTS:

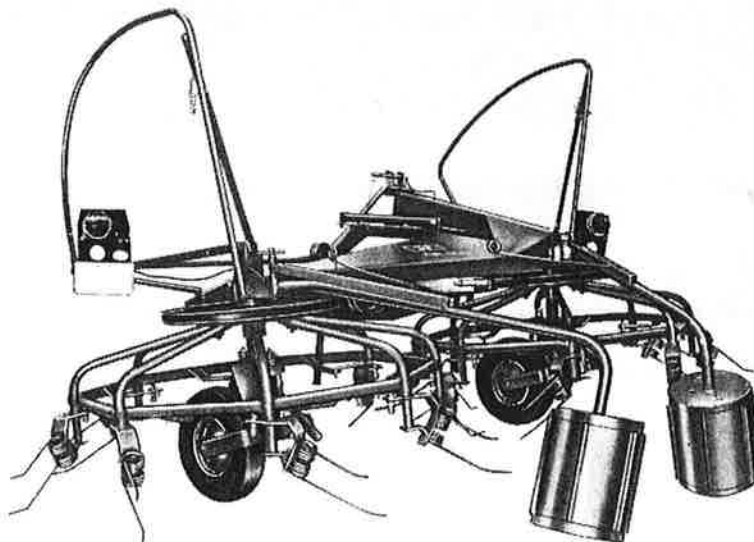
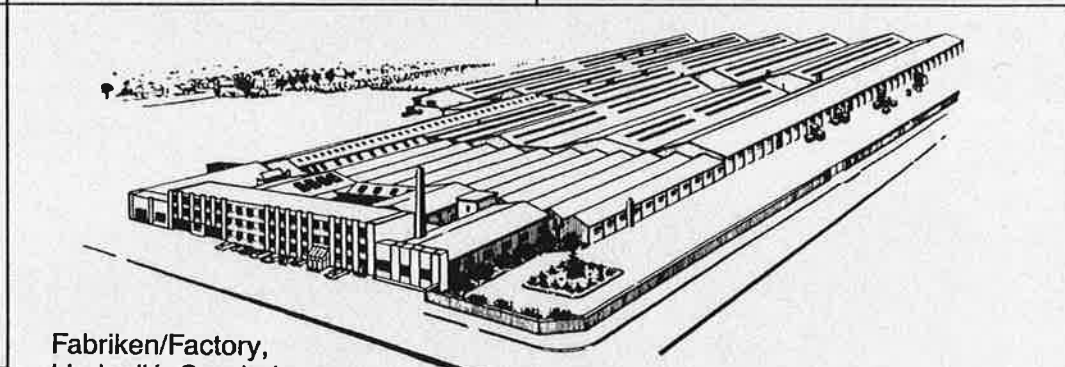
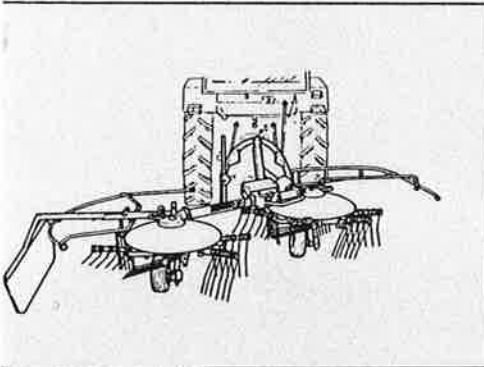
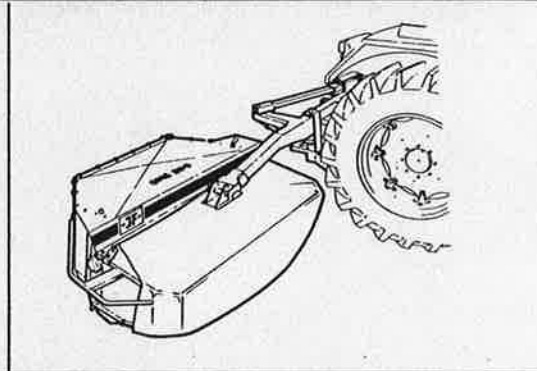
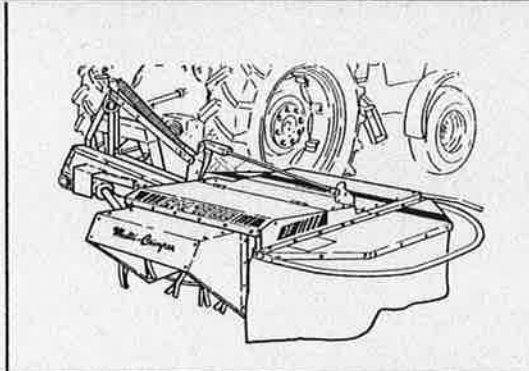
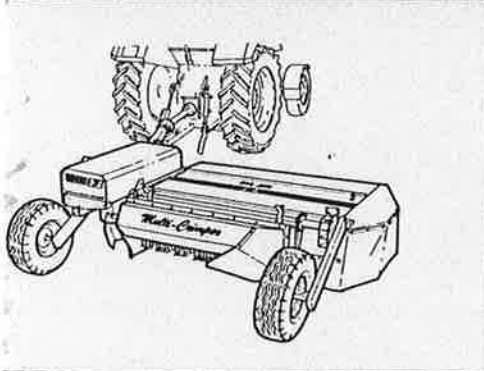


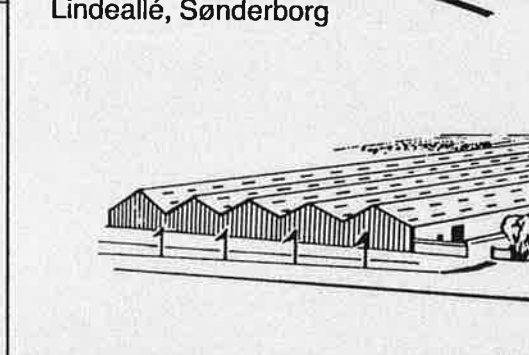
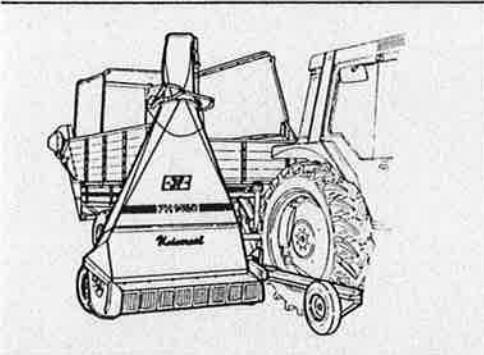
Fig. 23.



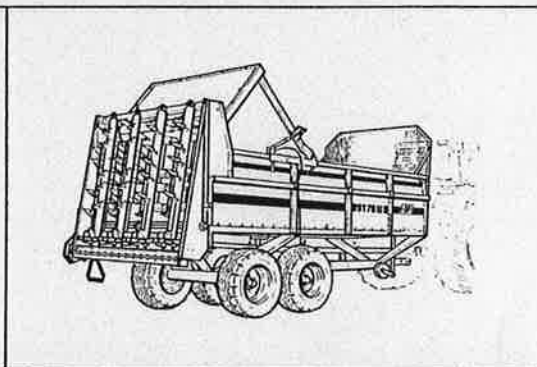
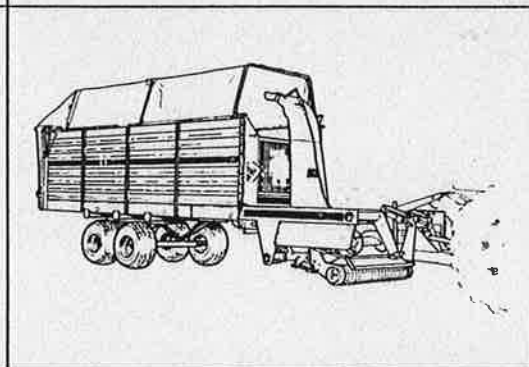
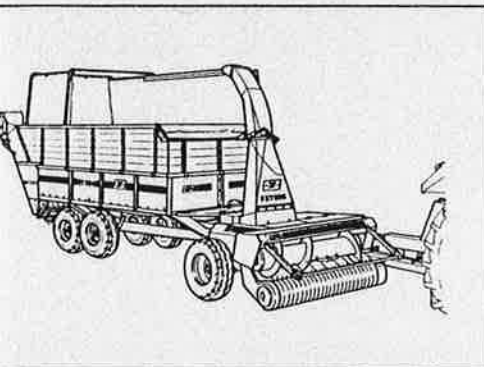
Et omfattende maskinprogram
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